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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,106	10/14/2004	Tuija Hurta	800.0205.U1(US)	6476
29683	7590	05/17/2010		
HARRINGTON & SMITH 4 RESEARCH DRIVE, Suite 202 SHELTON, CT 06484-6212			EXAMINER MAGLOIRE, VLADIMIR	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 05/17/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,106

Applicant(s)

HURTTA, TUIJA

Examiner

VLADIMIR MAGLOIRE

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. Receipt is acknowledged of a request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) and a submission, filed on 3/1/2010. Since this application is eligible for continued examination under CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office Action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/1/2010 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1 to 20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. Claims 16 and 17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The added material, to claims 16 and 17, which is not supported by the original disclosure is as follows: "...and at least one memory including computer program code...wherein the at least one memory and the computer program code are configured to..".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

1. Claims 1-9 and 12-15 are rejected under 35 U.S.C. 102(a) as being anticipated by 3GPP TR 23.846 1.0.0 published 1/2002, hereinafter **TR23846v1**.

Consider claim 1, TR23846v1 discloses a method (see **TR23846v1, section 7.2.2.1, fig. 16 steps 1 to 12 discloses a method**) comprising:

providing to a first switching node (see **TR23846v1, fig. 23 GGSN**) information indicating a first number of a plurality of connections required between a second switching node (see **TR23846v1, fig. 23 SGSN**) and a plurality of terminal devices (see **TR23846v1, fig. 23 RNCs**), (see **TR23846v1, section 7.2.2.1, fig. 16 steps 8-9, section A.2, fig. 23 discloses setting up multiple tunnels as a result of the RAN, which sends a message to the SGSN containing contains which RNCs have acknowledged the MBMS service request, therefore the Create MBMS Context Response in step 9 provides information indicating a first number of a plurality of connections, a connection per RNC as shown in fig.23**); and

determining based on said provided information a second number of connections to be set up between said first switching node and said second switching node of a data network to set up a broadcast or multicast transmission for a broadcast or multicast service to the plurality of terminal devices (see **TR23846v1, section 7.2.2.1 step 8 to 9,**

section A.2, fig. 3, discloses sending MBMS data from the GGSN to SGSN and finally to the RNCs via respective tunnels, therefore based on the RAN response in steps 8 and 9 multiple second connections are established, one GGSN to SGSN tunnel per RNC)

setting up said second number of connections between said first switching node and second switching node, wherein said second number is at least two (**see TR23846v1, section A.2, fig. 23 discloses multiple connections between the GGSN and the SGSN**).

Consider claim 12, TR23846v1 discloses a system comprising (**see TR23846v1, section A.2 and fig. 23, discloses a system**),

a first switching node (**see TR23846v1, fig. 23 “GGSN”**); and

a second switching node (**see TR23846v1, fig. 23 “SGSN”**),

wherein the first switching node is configured to set up an initial connection to said second switching node (**see TR23846v1, sections 6.3, 7.2.2.1, A.2, discloses the GGSN is configured to set up the initial connection with the SGSN**)

wherein said second switching node is configured to transmit to said first switching node via an initial connection information indicating a first number of a plurality of connections required between said second switching node and a plurality of devices (**see TR23846v1, section 7.2.2.1, fig. 16 steps 8-9, section A.2, fig. 23 discloses setting up multiple tunnels as a result of the RAN, which sends a message to the SGSN containing which RNCs have acknowledged the MBMS service request, therefore the Create MBMS Context Response in step 9 provides**

information indicating a first number of a plurality of connections, a connection per RNC as shown in fig.23); and

wherein said first switching node is configured to determine based on said information a second number of connections to be set up between said first switching node and said second switching node to set up a broadcast or multicast transmission for a broadcast or multicast service to said plurality of terminal devices **(see TR23846v1, section 7.2.2.1 step 8 to 9, section A.2, fig. 3, discloses sending MBMS data from the GGSN to SGSN and finally to the RNCs via respective tunnels, therefore based on the RAN response in steps 8 and 9 multiple second connections are established, one GGSN to SGSN tunnel per RNC),**

Consider claim 2, TR23846v1 discloses method according to claim 1, wherein said second number of connections to be set up between said first and second switching nodes is determined to be equal to said first number of connections indicated by said provided information **(see TR23846v1, fig. 23 discloses equal number of GGSN-SGSN tunnels as there are SGSN-RNC tunnels).**

Regarding claim 3, the limitations have been analyzed in claim 1.

Consider claim 4, TR23846v1 a method according to claim 1, wherein said connections are tunnel connections **(see TR23846, section A.2, discloses tunnel connections).**

Consider claim 5, TR23846v1 discloses a method according to claim 1, wherein said providing comprises setting up an initial connection between said first and second switching nodes and transmitting said information from said second switching node to

said first switching node in response to a request of said first switching node (**see TR23846v1, section 7.2.2.1**).

Consider claim 6, TR23846v1 discloses a method according to claim 5, wherein said information is transmitted in a response message to a context activation request (**see TR23846v1, section 7.2.2.1 steps 8-9**).

Consider claim 7, TR23846v1 discloses a method according to claim 5, wherein said information is transmitted in a response message to an identification request issued by said first switching node (**see TR23846v1, section 7.2.2.1 steps 1 to 9**).

Consider claim 8, TR23846v1 discloses a method according to claim 7, wherein a context activation for said determined number of connections is requested by said first switching node in response to the receipt of said response message (**see TR23846v1, section 7.2.2.1 steps 1 to 9**).

Consider claim 9, TR23846v1 discloses a method according to claim 7, wherein a context activation for said determined number of connections is requested by said second switching node after the transmission of said response message (**see TR23846v1, section 7.2.2.1 steps 1 to 9**).

Consider claim 13, TR23846v1 discloses a system according to claim 12, wherein said first switching node is a gateway general packet radio services support node and said second switching node is a serving general packet radio services support node (**see the analysis of claim 12**).

Consider claim 14, TR23846v1 discloses a system according to claim 12, wherein said second switching node is configured to transmit said information in a

response message to a context activation request issued by said first switching node **(see TR23846v1, section 7.2.2.1 steps 1 to 9)**.

Consider claim 15, TR23846v1 discloses a system according to claim 12, wherein said second switching node is configured to transmit said information in a response message to a identification request issued by said first switching node **(see TR23846v1, section 7.2.2.1 steps 1 to 9)**.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over TR23846v1 in view of Leroy (EP 1071296 A1, previously listed in prior office action therefore a copy is not provided and not listed in this actions PTO-892).

Consider claim 16, TR23846v1 discloses an apparatus **(see TR23846v1, fig. 23 discloses an apparatus)** comprising:

at least one processor **(the GGSN or the SGSN must contain at least one processor to enable the system disclosed in section 7 and A.2 of TR23846v1)**,

causing the apparatus to:

derive information indicating a first number of a plurality of connections required between other a switching node and a plurality of terminals devices **(see TR23846v1,**

section 7.2.2.1, section A.2, discloses determining from the SGSN MBMS context information the MBMS service to provide to each RNC “terminal device”); and

determine based on said derived information a second number of connections to be set up to said switching node to set up a broadcast or multicast transmission for one multicast/broadcast multimedia service to said plurality of terminal devices **(see TR23846v1, section 7.2.2.1, section A.2, discloses determining from the SGSN MBMS context information the MBMS service to provide to each RNC “terminal device” and then setting one tunnel per RNC from the GGSN to SGSN),**

set up said second number of connections between said first switching node and second switching node, wherein said second number is at least two **(see TR23846v1, section A.2, fig. 23 discloses multiple connections between the GGSN and the SGSN).**

TR23846v1 does not specifically disclose at least one memory including computer program code, wherein the at least one memory and the computer program code are configured to, with the at least one processor.

However, since computer code stored in a memory and processors that implement functionality of switches were well known in the art at the time of the invention, and furthermore to implement a system which keeps track of at least charging, MBMS usage, tunneling would require a computer code and processor.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the MBMS system disclosed in TR23846v1 at least one

memory including computer program code, wherein the at least one memory and the computer program code are configured to, with the at least one processor.

TR23846v1 does not specifically disclose accessing a memory table.

In the same field of endeavor, Leroy discloses accessing a memory table (**see Leroy, paragraphs [0025-0028, 0030], fig. 3 “routing table”**).

Given TR23846v1 discloses using ip routers, but fails to specify the details of the ip router, that ip routers typically use routing tables and that Leroy discloses the well known technique of accessing a memory table in a MBMS system, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify TR23846 by specifying the well known technique of accessing a routing table, as taught by Leroy.

Consider claim 10, the combination TR23846v1 does not specifically disclose a method according to claim 1, wherein said providing step comprises the steps of storing said information in a memory table accessible by said first switching node.

In the same field of endeavor, Leroy discloses accessing a memory table (**see Leroy, paragraphs [0025-0028, 0030], fig. 3 “routing table”**).

Given TR23846v1 discloses using ip routers, but fails to specify the details of the ip router, that ip routers typically use routing tables and that Leroy discloses the well known technique of accessing a memory table in a MBMS system, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify TR23846 by specifying the well known technique of accessing a routing table, as taught by Leroy.

4. Claims 11, 17 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over TR23846v1 in view of Mizell (US 7,289,462 B1: hereinafter "Mizell", previously listed in prior office action therefore not listed in this actions PTO-892).

Consider claim 17, TR23846v1 discloses an apparatus (**see TR23846v1, fig. 23 discloses an apparatus**) comprising:

at least one processor (**the GGSN or the SGSN must contain at least one processor to enable the system disclosed in section 7 and A.2 of TR23846v1**);

TR23846v1 discloses determining, using a multicast address or a multicast area identification, information indicating a first number of connections required between switching node and a plurality of terminal devices (**see TR23846v1, section 7.2.2.1, fig. 16 steps 8-9, section A.2, fig. 23 discloses setting up multiple tunnels as a result of the RAN, which sends a message to the SGSN containing which RNCs have acknowledged the MBMS service request, therefore the Create MBMS Context Response in step 9 provides information indicating a first number of a plurality of connections, a connection per RNC as shown in fig.23**),

determine based on said information a number of connections to be set up to said switching node to set up a broadcast or multicast transmission for one multicast or broadcast multimedia service to said plurality of terminal devices (**see TR23846v1, section 7.2.2.1, section A.2, discloses determining from the SGSN MBMS context information the MBMS service to provide to each RNC "terminal device" and then setting one tunnel per RNC from the GGSN to SGSN**),

set up said second number of connections between said first switching node and second switching node, wherein said second number is at least two (**see TR23846v1, section A.2, fig. 23 discloses multiple connections between the GGSN and the SGSN**).

TR23846 does not specifically disclose at least one memory including computer program code, wherein the at least one memory and the computer program code are configured to, with the at least one processor.

However, computer code stored in a memory and processors that implement functionality of switches were well known in the art at the time of the invention, and furthermore to implement a system which keeps track of at least charging, MBMS usage, tunneling would require a computer code and processor.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to include in the MBMS system disclosed in TR23846v1 at least one memory including computer program code, wherein the at least one memory and the computer program code are configured to, with the at least one processor.

TR23846v1 does not specifically disclose query, using a multicast identification or a multicast area identification, from an address server.

In the same field of endeavor, Mizell discloses query from an address server to determine MBMS service (**see Mizell, fig. 4**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify TR23846v1 by querying an address server, as taught by Mizell, thereby creating a more efficient request process (see Mizell, Col 2, lines 52 to 67).

Consider claim 11, TR23846v1 does not specifically disclose a method according to claim 1, wherein said providing comprises performing a query to an address server using an identification information or an area identification information of said broadcast or multicast transmission.

In the same field of endeavor, Mizell discloses query from an address server to determine MBMS service (**see Mizell, fig. 4**).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify TR23846v1 by querying an address server, as taught by Mizell, thereby creating a more efficient request process (see Mizell, Col 2, lines 52 to 67).

Consider claim 18, the combination of TR23846v1 and Mizell disclose an apparatus according to claim 17, wherein said address server is a domain name server (**see Mizell, fig. 5 item 508 and 512, discloses querying a DHCP server, as opposed to a DNS server, however it would have obvious to specify a DNS server since a DNS and DHCP servers are commonly combined**).

Consider claim 19, the combination of TR23846v1 and Mizell discloses an apparatus according to claim 16 or 17, wherein said switching node is a gateway general packet radio services support node (**see Claim 17 analyses**).

Consider claim 20, the combination of TR23846v1 and discloses an apparatus according to claim 17, wherein said switching node is a gateway general packet radio services support node (**see Claim 17 analyses**).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VLADIMIR MAGLOIRE whose telephone number is

Art Unit: 2617

(571)270-5144. The examiner can normally be reached on Monday to Thursday, 8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571-272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUY PHAN/
Primary Examiner, Art Unit 2617

/Vladimir Magloire/
Examiner, Art Unit 2617 5/11/10